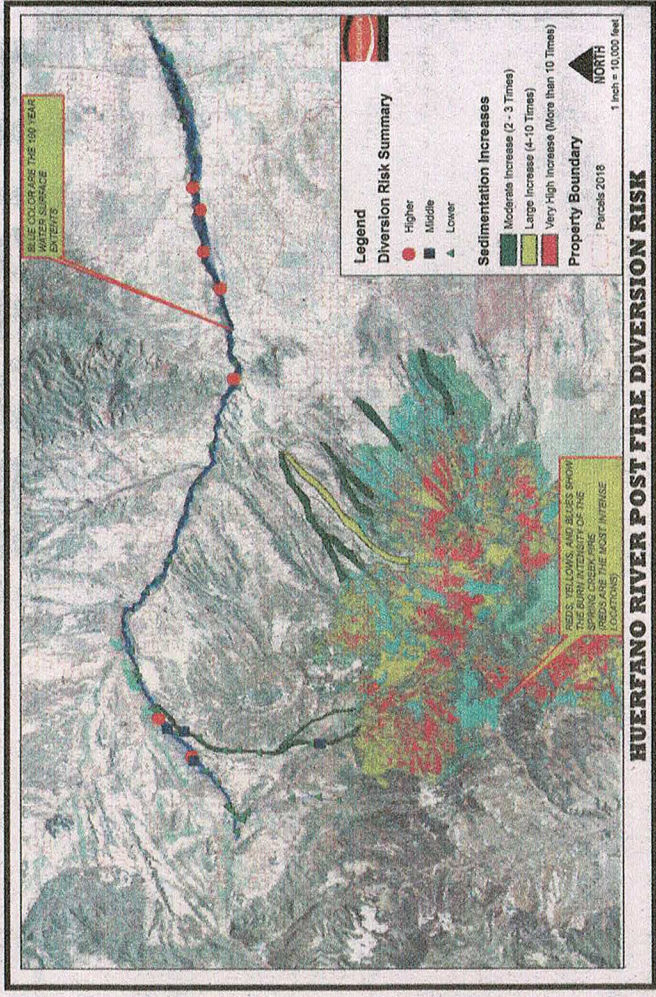
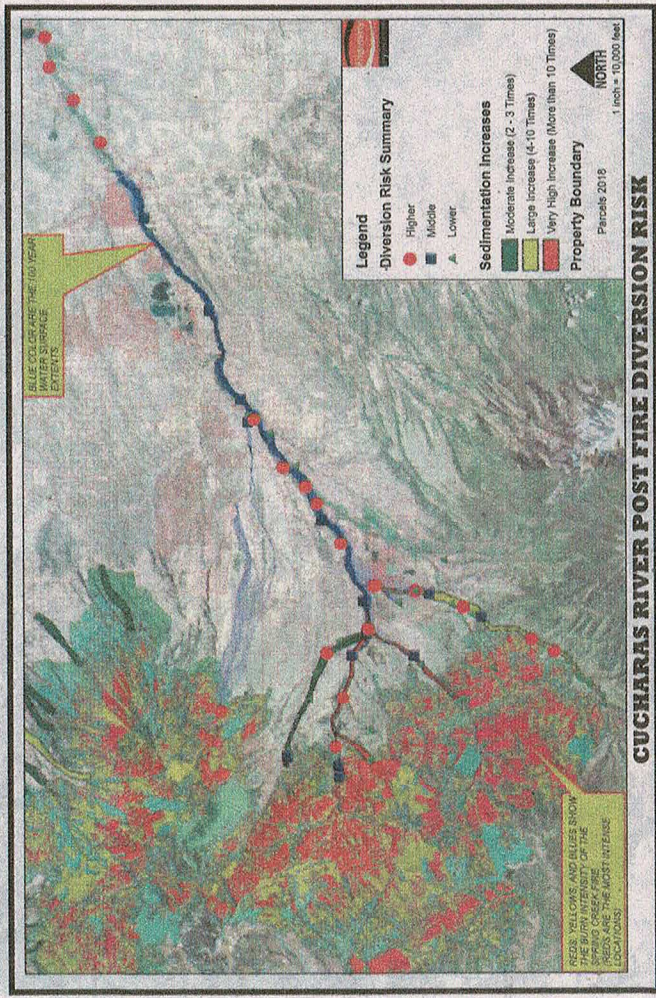


Meeting held to report on headgate and diversion risks from post-fire flooding



by Caitlin Dunn

HUERFANO — For the past two months, Dr. Gerald Blackler, PE and Senior Water Resources Engineer with Engrinity, has been conducting a study of headgates and diversions in Huerfano County to determine which are at greatest risk of being damaged or destroyed by potential post-fire flooding originating from the 2018 Spring Fire burn scar. The study was made possible by a \$76,951 grant from the Colorado Water Conservation Board, administered by the Huerfano County Water Conservancy District (HCWCD). Blackler presented his findings at a sparsely attended meeting from 3:00 to 5:00 p.m. on Saturday, June 8 at the Washington School in Walsenburg.

The goals of the project were to identify increased risks to water diversions; provide information on how to repair and quickly re-establish water diversions in compliance with local, state and federal requirements; inform water right holders of the process for repairs if a point of diversion is jeopardized by flooding, sedimentation or scouring.

Blackler developed models for both rivers in Huerfano County to determine flow rates at 123 diversion locations, 70 on the Cucharas and 53 on the Huerfano. The models included a range of flow rates, from one-year to 500-year floods. A risk ranking was then developed which shows each diverter whether their diversion/headgate is at higher (red dot), middle (blue square) or lower (green triangle) risk of damage. Blackler stressed, "If your structure is in the low-risk category, that doesn't mean nothing will happen or it won't get damaged. And high-risk doesn't mean damage is imminent. There are a lot of factors to consider, for instance how sturdy the headgate is constructed."

IF HEADGATES DAMAGED OR DESTROYED, WAIT TO REPLACE

Blackler explained if headgates or diversions are damaged or destroyed, diverters may want to wait to replace them because additional damaging floods can occur for four or five – and up to ten – years after a catastrophic event

like the Spring Fire. "Most of the sediment will be carried in floods during the first two years," he explained, estimating that perhaps ten-times the normal sediment load will be carried by the rivers. "You probably don't want to replace a headgate right away," he said. Blackler provided sketches for point of diversion replacement and for scour protection. "These are not stamped engineering drawings," he said, "but they are workable options."

A consideration when making repairs to diversions is the US Army Corps of Engineers (USACE) Clean Water Act section 404 permit restrictions on working in rivers. Fortunately in this case, there are three pertinent exceptions that diverters might use, including exemptions for "normal farming," "irrigation," and "maintenance."

TEMPORARY DIVERSIONS MUST FOLLOW STATE GUIDELINES

Blackler urged, and Water Commissioner Doug Brgoch agreed, if a water user's diversion structure is damaged,

they should contact their Water Commissioner to be sure any temporary structure follows state guidelines and has a measuring device. On the Cucharas, that is Brgoch at 719-859-0122 or Doug.Brgoch@state.co.us; on the Huerfano it's Lenna Rauber at 719-568-0489 or Lenna.Rauber@state.co.us.

HCWCD will be cooperating with the La Veta and Walsenburg libraries to display the study maps with locations of affected diversions. The point of diversion risk summaries – one for diversions on the Huerfano River and another for those on the Cucharas – will be available to diverters at no charge until June 30. A supply of the three USACE 404 permit exemption summaries will also be made available.

To access Blackler's study results online, including maps, point of diversion replacement sketches, and Google Earth files, visit the HCWCD website (www.hcwcd.net) and select the tab for Post-fire Projects.